

SEQUENCE LISTING

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<120> Method of Producing and Purifying Endostatin Protein

<130> 05213-0551US (43170-258385)

<140> US 10/070,560

<141> 2002-03-08

<150> 60/153,698

<151> 1999-09-14

<150> PCT/US00/25166

<151> 2000-09-14

<160> 12

<170> PatentIn version 3.1

<210> 1

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<212> DNA

<213> Artificial Sequence

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<223> Synthetic primer

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<213> Artificial Sequence

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<223> Synthetic primer

<400> 2
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<210> 3

<211> 183

<212> PRT

<213> Homo sapiens

<400> 3

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Ser Pro Leu Ser Gly Gly Met Arg Gly Ile Arg Gly Ala Asp Phe Gln
 20 25 30

Cys Phe Gln Gln Ala Arg Ala Val Gly Leu Ala Gly Thr Phe Arg Ala
 35 40 45

Phe Leu Ser Ser Arg Leu Gln Asp Leu Tyr Ser Ile Val Arg Arg Ala
 50 55 60

Asp Arg Ala Ala Val Pro Ile Val Asn Leu Lys Asp Glu Leu Leu Phe
 65 70 75 80

Pro Ser Trp Glu Ala Leu Phe Ser Gly Ser Glu Gly Pro Leu Lys Pro
 85 90 95

Gly Ala Arg Ile Phe Ser Phe Asp Gly Lys Asp Val Leu Arg His Pro
 100 105 110

Thr Trp Pro Gln Lys Ser Val Trp His Gly Ser Asp Pro Asn Gly Arg
 115 120 125

Arg Leu Thr Glu Ser Tyr Cys Glu Thr Trp Arg Thr Glu Ala Pro Ser
 130 135 140

Ala Thr Gly Gln Ala Ser Ser Leu Leu Gly Gly Arg Leu Leu Gly Gln
 145 150 155 160

Ser Ala Ala Ser Cys His His Ala Tyr Ile Val Leu Cys Ile Glu Asn
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Ser Phe Met Thr Ala Ser Lys
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<210> 4

<211> 549

<212> DNA

<213> Homo sapiens

<400> 4

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gggctggcgg gcaccttccg cgccttcctg tcctcgcgcc tgcaggacct gtacagcatc    180
gtgcgccgtg ccgaccgcg cagccgtgccc atcgtcaacc tcaaggacga gctgctgttt    240
cccagctggg aggtctgttt ctcaggctct gagggctcgc tgaagcccg ggcacgcac      300
ttctcctttg acggcaagga cgtcctgagg caccacacct ggcccagaa gagcgtgtgg    360
catggctcgg accccaacgg gcgcaggctg accgagagct actgtgagac gtggcggacg    420
gaggctccct cggccacggg ccaggcctcc tcgctgctgg ggggcaggct cctggggcag    480
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<210> 5

<211> 182

<212> PRT

<213> Homo sapiens

<400> 5

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His Ser His Arg Asp Phe Gln Pro Val Leu His Leu Val Ala Leu Asn
1           5           10           15

Ser Pro Leu Ser Gly Gly Met Arg Gly Ile Arg Gly Ala Asp Phe Gln
          20           25           30

Cys Phe Gln Gln Ala Arg Ala Val Gly Leu Ala Gly Thr Phe Arg Ala
          35           40           45

Phe Leu Ser Ser Arg Leu Gln Asp Leu Tyr Ser Ile Val Arg Arg Ala
          50           55           60

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Asp Arg Ala Ala Val Pro Ile Val Asn Leu Lys Asp Glu Leu Leu Phe
 65 70 75 80

Pro Ser Trp Glu Ala Leu Phe Ser Gly Ser Glu Gly Pro Leu Lys Pro
 85 90 95

Gly Ala Arg Ile Phe Ser Phe Asp Gly Lys Asp Val Leu Arg His Pro
 100 105 110

Thr Trp Pro Gln Lys Ser Val Trp His Gly Ser Asp Pro Asn Gly Arg
 115 120 125

Arg Leu Thr Glu Ser Tyr Cys Glu Thr Trp Arg Thr Glu Ala Pro Ser
 130 135 140

Ala Thr Gly Gln Ala Ser Ser Leu Leu Gly Gly Arg Leu Leu Gly Gln
 145 150 155 160

Ser Ala Ala Ser Cys His His Ala Tyr Ile Val Leu Cys Ile Glu Asn
 165 170 175

Ser Phe Met Thr Ala Ser
 180

<210> 6

<211> 181

<212> PRT

<213> Homo sapiens

<400> 6

His Ser His Arg Asp Phe Gln Pro Val Leu His Leu Val Ala Leu Asn
 1 5 10 15

Ser Pro Leu Ser Gly Gly Met Arg Gly Ile Arg Gly Ala Asp Phe Gln
 20 25 30

His Ser His Arg Asp Phe Gln Pro Val Leu His Leu Val Ala Leu Asn
1 5 10 15

Ser Pro Leu Ser Gly Gly Met Arg Gly Ile Arg Gly Ala Asp Phe Gln
 20 25 30

Cys Phe Gln Gln Ala Arg Ala Val Gly Leu Ala Gly Thr Phe Arg Ala
 35 40 45

Phe Leu Ser Ser Arg Leu Gln Asp Leu Tyr Ser Ile Val Arg Arg Ala
 50 55 60

Asp Arg Ala Ala Val Pro Ile Val Asn Leu Lys Asp Glu Leu Leu Phe
 65 70 75 80

Pro Ser Trp Glu Ala Leu Phe Ser Gly Ser Glu Gly Pro Leu Lys Pro
 85 90 95

Gly Ala Arg Ile Phe Ser Phe Asp Gly Lys Asp Val Leu Arg His Pro
 100 105 110

Thr Trp Pro Gln Lys Ser Val Trp His Gly Ser Asp Pro Asn Gly Arg
 115 120 125

Arg Leu Thr Glu Ser Tyr Cys Glu Thr Trp Arg Thr Glu Ala Pro Ser
 130 135 140

Ala Thr Gly Gln Ala Ser Ser Leu Leu Gly Gly Arg Leu Leu Gly Gln
 145 150 155 160

Ser Ala Ala Ser Cys His His Ala Tyr Ile Val Leu Cys Ile Glu Asn
 165 170 175

Ser Phe Met Thr
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<210> 8

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<212> PRT

<213> Homo sapiens

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Gly Gly Met Arg Gly Ile Arg Gly Ala Asp Phe Gln Cys Phe Gln Gln
 20 25 30

Ala Arg Ala Val Gly Leu Ala Gly Thr Phe Arg Ala Phe Leu Ser Ser
 35 40 45

Arg Leu Gln Asp Leu Tyr Ser Ile Val Arg Arg Ala Asp Arg Ala Ala
 50 55 60

Val Pro Ile Val Asn Leu Lys Asp Glu Leu Leu Phe Pro Ser Trp Glu
 65 70 75 80

Ala Leu Phe Ser Gly Ser Glu Gly Pro Leu Lys Pro Gly Ala Arg Ile
 85 90 95

Phe Ser Phe Asp Gly Lys Asp Val Leu Arg His Pro Thr Trp Pro Gln
 100 105 110

Lys Ser Val Trp His Gly Ser Asp Pro Asn Gly Arg Arg Leu Thr Glu
 115 120 125

Ser Tyr Cys Glu Thr Trp Arg Thr Glu Ala Pro Ser Ala Thr Gly Gln
 130 135 140

Ala Ser Ser Leu Leu Gly Gly Arg Leu Leu Gly Gln Ser Ala Ala Ser
 145 150 155 160

Cys His His Ala Tyr Ile Val Leu Cys Ile Glu Asn Ser Phe Met Thr
 165 170 175

Ala Ser Lys

<210> 9

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic primer

<400> 9

tctctcgaga aaagagactt ccagccggtg etc

33

<210> 10

<211> 537

<212> DNA

<213> Homo sapiens

<400> 10

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accttccgcg ccttctgtc ctgcgcctg caggacctgt acagcatcgt gcgccgtgcc 180

gaccgcgcag ccgtgcccac cgtcaacctc aaggacgagc tgctgtttcc cagctgggag 240

gctctgttct caggctctga gggtcgctg aagcccggg cagcatctt ctctttgac 300

ggcaaggacg tcctgaggca cccacctgg cccagaaga gcgtgtggca tggctcggac 360

cccaacgggc gcaggctgac cgagagctac tgtgagacgt ggcggacgga ggctccctcg 420

gccacgggcc aggcctctc gctgctgggg ggcaggctcc tggggcagag tgccgcgagc 480

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<210> 11

<211> 178

<212> PRT

<213> Homo sapiens

<400> 11

Asp Phe Gln Pro Val Leu His Leu Val Ala Leu Asn Ser Pro Leu Ser
 1 5 10 15

Gly Gly Met Arg Gly Ile Arg Gly Ala Asp Phe Gln Cys Phe Gln Gln
 20 25 30

Ala Arg Ala Val Gly Leu Ala Gly Thr Phe Arg Ala Phe Leu Ser Ser
 35 40 45

Arg Leu Gln Asp Leu Tyr Ser Ile Val Arg Arg Ala Asp Arg Ala Ala
 50 55 60

Val Pro Ile Val Asn Leu Lys Asp Glu Leu Leu Phe Pro Ser Trp Glu
 65 70 75 80

Ala Leu Phe Ser Gly Ser Glu Gly Pro Leu Lys Pro Gly Ala Arg Ile
 85 90 95

Phe Ser Phe Asp Gly Lys Asp Val Leu Arg His Pro Thr Trp Pro Gln
 100 105 110

Lys Ser Val Trp His Gly Ser Asp Pro Asn Gly Arg Arg Leu Thr Glu
 115 120 125

Ser Tyr Cys Glu Thr Trp Arg Thr Glu Ala Pro Ser Ala Thr Gly Gln
 130 135 140

Ala Ser Ser Leu Leu Gly Gly Arg Leu Leu Gly Gln Ser Ala Ala Ser
 145 150 155 160

Cys His His Ala Tyr Ile Val Leu Cys Ile Glu Asn Ser Phe Met Thr
 165 170 175

Ala Ser

<210> 12

<211> 26

<212> PRT

<213> Artificial Sequence

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<223> Synthetic peptide

<400> 12

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			20					25	